

GP-302076

NON-FLAMMABLE EXHAUST ENABLE
FOR HYDROGEN POWERED FUEL CELLS

ABSTRACT OF THE DISCLOSURE

A fuel cell system that employs a purge valve, an accumulator and a bleed valve for selectively purging and bleeding anode exhaust gas. When the purge valve is opened, the anode exhaust gas purges to the accumulator where it is collected. The bleed valve provides a controlled release of the anode exhaust gas from the accumulator that allows the concentration of hydrogen bled from the accumulator to remain below its combustible limit. In one embodiment, the purged anode exhaust gas is combined with the cathode exhaust gas and released to atmosphere. In another embodiment, the purged anode exhaust gas is combined with a cathode input gas. In another embodiment, the purged anode exhaust gas is combined with an anode input gas.